IN THE CLAIMS:

Claim 1 has been amended as follows:

- 1. (Currently Amended) A high-capacity x-ray tube comprising:
- a vacuum housing;
- a cathode stationarily mounted in said vacuum housing;
- an anode rotatably mounted in said vacuum housing;
- a drive for rotating said anode, said drive having a bearing shaft disposed in said vacuum housing; and
- said anode comprising an anode plate and a load-bearing part having a first end attached to said bearing shaft and a second end attached to said anode plate via a soldered connection between respective connection surfaces of said anode plate and said load bearing part, with said connection surfaces configured and oriented relative to each other to form a positive fit for causing said connection surfaces to be subject substantially only to compression upon rotation of said anode; and
- said connection surfaces comprising a first surface at said second end of said

 load-bearing part and a second surface formed by an inner annular

 edge of said anode plate, said first and second surfaces facing each

 other and, as viewed toward said bearing shaft, said first surface

 comprising a plurality of gradations, at least one of said gradations

 producing said positive fit and at least one further one of said

 gradations forming, with said second surface, an acceptance space for

 solder of said solder connection.
- 2. (Original) A high-capacity x-ray tube as claimed in claim 1 wherein said connection surfaces form a clamp connection as said positive fit.

- 3. (Original) A high-capacity x-ray tube as claimed in claim 1 wherein said connection surfaces form a screw connection as said positive fit.
- 4. (Original) A high-capacity x-ray tube as claimed in claim 1 wherein said solder connection contributes to said positive fit.

Claim 5 has been cancelled.

- 5. (Cancelled)
- 6. (Original) A high-capacity x-ray tube as claimed in claim 1 wherein said solder connection produces flaked solder particles, and wherein said connection surfaces form a recess for catching said solder particles.
- 7. (Original) A high-capacity x-ray tube as claimed in claim 6 wherein one of said connection surfaces is beveled to form said recess.
- 8. (Original) A high-capacity x-ray tube as claimed in claim 1 wherein said solder connection comprises titanium solder.